Gunter, Jason

From: Seabourne, Rocky <rseabourne@doerun.com>
Sent: Friday, October 30, 2015 10:15 AM
To: 'brandon.wiles@dnr.mo.gov'; Gunter, Jason; "Kevin Lombardozzi' (kevinl@VALHI.NET)'; Matt Whitwell (mwhitwell@parkhillsmo.net); Montgomery, Michael; Neaville, Chris; 'Norman Lucas (cityhall@i1.net)'; Ty Morris; Yingling, Mark
Subject: Emailing: National_ProgressReport_09-30, 2015-09-02 NAT UAO Pace Lab Report
Attachments: National_ProgressReport_09-30.pdf; 2015-09-02 NAT UAO Pace Lab Report.pdf

Your message is ready to be sent with the following file or link attachments:

National_ProgressReport_09-30
2015-09-02 NAT UAO Pace Lab Report

Note: To protect against computer viruses, e-mail programs may prevent sending or receiving certain types of file attachments. Check your e-mail security settings to determine how attachments are handled.

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THE DOE RUN COMPANY
Stewardship. Integrity. Commitment.
150 YEARS
SOUTHEAST MISSOURI
MINING AND MILLING DIVISION
P.O. Box 500
Viburnum, MO 65566

Rocky Seabourne
General Supervisor Land & Remediation
rseabourne@doerun.com

October 30, 2015

Mr. Jason Gunter Remedial Project Manager U.S. Environmental Protection Agency
Region 7 – Superfund Branch 11201 Renner Blvd.
Lenexa, KS 66219

RE: National Mine Tailings Site Progress Report

Dear Mr. Gunter:

As required by Article VI, Section 51 of the Unilateral Administrative Order (UAO) (Docket No.CERCLA-07-2006-0231) for the referenced project and on behalf of The Doe Run Company and NL Industries, Inc., the progress report for the period of September 1, 2015 through September 30, 2015 is enclosed. If you have any questions or comments, please feel free to contact me at 573-244-8136.

Sincerely,

Rocky Seabourne

General Supervisor Land & Remediation
c:Mark Yingling – TDRC (electronic only)
Chris Neaville – TDRC (electronic only)
Michael Montgomery - TDRC (electronic only)
Kevin Lombardozzi – NL Industries, Inc.
Matt Whitwell – City of Park Hills
Norm Lucas – Park Hills – Leadington Chamber of Commerce
Brandon Wiles – MDNR HWP
Ty Morris – Barr Engineering

National Mine Tailings Site
Park Hills, Missouri
Removal Action - Monthly Progress Report
Period: September 1, 2015 – September 30, 2015

1. Actions Performed and Problems Encountered This Period:
    a. Work continued on the development of the Post-Removal Site Control Plan for the site.
    b. On November 2014, 2014 The Doe Run Company submitted a letter to EPA requesting that they be allowed to stop air monitoring activities at this site. EPA approved this request on May 27, 2015. No further air monitoring or reporting will take place for the National Mine Tailings Site.
    c. Given the nature of the work remaining at the site, The Doe Run Company would like to request a reduction in the frequency of the progress reports to quarterly. The next progress report that would be submitted for this site would be for July, August, and September.
    d. Monthly water samples were taken during the removal action activities. These samples have been continued since the completion of the removal action activities. The analytical results, which have been included in the progress reports, have shown little variation. As a result Doe Run would like to request a reduction in the frequency of the sampling to quarterly.

2. Analytical Data and Results Received This Period:

    a. During this period, water samples were collected at the sampling locations identified in Appendix C of the Removal Action Work Plan where water was present. Copies of the analytical results from the last sampling event are included with this progress report.

3. Developments Anticipated and Work Schedule for Next Period:

    a. Complete the water sampling activities.
    b. Continue developing the Removal Action Report and the record drawings.
    c. Finalize and submit the Post Removal Site Control Plan for the site.

4. Issues or Problems Encountered and the Resolution:

    a. None.

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

September 11, 2015

Amy Sanders
The Doe Run Company
P. O. Box 500
Viburnum, MO 65566

RE: Project: NATIONAL UAO (NATIONAL)
Pace Project No.: 60201959

Dear Amy Sanders:
Enclosed are the analytical results for sample(s) received by the laboratory on September 03, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jamie Church
jamie.church@pacelabs.com
Project Manager

Enclosures

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

CERTIFICATIONS

Project: NATIONAL UAO (NATIONAL)
Pace Project No.: 60201959

Kansas Certification IDs
9608 Loiret Boulevard, Lenexa, KS 66219
WY STR Certification #: 2456.01
Arkansas Certification #: 15-016-0
Illinois Certification #: 003097
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Nevada Certification #: KS000212008A
Oklahoma Certification #: 9205/9935
Texas Certification #: T104704407
Utah Certification #: KS00021

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Lenexa, KS 66219
(913)599-5665

SAMPLE SUMMARY

Project: NATIONAL UAO (NATIONAL)
Pace Project No.: 60201959

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60201959001	**36832/NAT EAST**	Water	09/02/15 11:21	09/03/15 08:30

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(913)599-5665

SAMPLE ANALYTE COUNT

Project: NATIONAL UAO (NATIONAL)
Pace Project No.: 60201959

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60201959001	**36832/NAT EAST**	EPA 200.7	SMW	6	PASI-K
		EPA 200.7	SMW	3	PASI-K
		SM 2540C	CRT	1	PASI-K
		SM 2540D	CRT	1	PASI-K
		SM 2540F	JMC1	1	PASI-K
		SM 4500-H+B	JMC1	1	PASI-K
		EPA 300.0	AJM	1	PASI-K
		SM 5310C	ESM	1	PASI-K

Pace Analytical Services, Inc.
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(913)599-5665

ANALYTICAL RESULTS

Project: NATIONAL UAO (NATIONAL)
Pace Project No.: 60201959

Sample: 36832/NAT EAST **Lab ID: 60201959001** Collected: 09/02/15 11:21 Received: 09/03/15 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7								
Cadmium	**0.63J**	ug/L	5.0	0.56	1	09/04/15 10:00	09/04/15 16:20	7440-43-9	
Calcium	**112000**	ug/L	100	5.2	1	09/04/15 10:00	09/04/15 16:20	7440-70-2	
Lead	**7.1**	ug/L	5.0	1.9	1	09/04/15 10:00	09/04/15 16:20	7439-92-1	
Magnesium	**57500**	ug/L	50.0	13.3	1	09/04/15 10:00	09/04/15 16:20	7439-95-4	
Total Hardness by 2340B	**517000**	ug/L	500		1	09/04/15 10:00	09/04/15 16:20		
Zinc	**263**	ug/L	50.0	2.6	1	09/04/15 10:00	09/04/15 16:20	7440-66-6	
200.7 Metals, Dissolved (LF)	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7								
Cadmium, Dissolved	ND	ug/L	5.0	0.56	1	09/04/15 10:00	09/04/15 17:23	7440-43-9	
Lead, Dissolved	**2.3J**	ug/L	5.0	1.9	1	09/04/15 10:00	09/04/15 17:23	7439-92-1	
Zinc, Dissolved	**182**	ug/L	50.0	2.6	1	09/04/15 10:00	09/04/15 17:23	7440-66-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C								
Total Dissolved Solids	**737**	mg/L	5.0	5.0	1		09/03/15 15:51		
2540D Total Suspended Solids	Analytical Method: SM 2540D								
Total Suspended Solids	**7.0**	mg/L	5.0	5.0	1		09/09/15 11:23		
2540F Total Settleable Solids	Analytical Method: SM 2540F								
Total Settleable Solids	ND	mL/L/hr	0.20	0.20	1		09/04/15 08:50		
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**8.0**	Std. Units	0.10	0.10	1		09/07/15 12:00		H6
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**265**	mg/L	20.0	4.7	20		09/09/15 00:51	14808-79-8	
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**1.1**	mg/L	1.0	0.46	1		09/10/15 14:42	7440-44-0	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA

Project: NATIONAL UAO (NATIONAL)
Pace Project No.: 60201959

QC Batch: MPRP/33069
QC Batch Method: EPA 200.7
Analysis Method: EPA 200.7
Analysis Description: 200.7 Metals, Total
Associated Lab Samples: 60201959001

METHOD BLANK: 1627885
Matrix: Water
Associated Lab Samples: 60201959001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cadmium	ug/L	ND	5.0	09/04/15 15:24	
Calcium	ug/L	27.8J	100	09/04/15 15:24	
Lead	ug/L	ND	5.0	09/04/15 15:24	
Magnesium	ug/L	ND	50.0	09/04/15 15:24	
Total Hardness by 2340B	ug/L	ND	500	09/04/15 15:24	
Zinc	ug/L	ND	50.0	09/04/15 15:24	

LABORATORY CONTROL SAMPLE: 1627886

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cadmium	ug/L	1000	968	97	85-115	
Calcium	ug/L	10000	9580	96	85-115	
Lead	ug/L	1000	971	97	85-115	
Magnesium	ug/L	10000	9400	94	85-115	
Total Hardness by 2340B	ug/L		62600			
Zinc	ug/L	1000	949	95	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1627887 1627888

Parameter	Units	60201956001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cadmium	ug/L	ND	1000	1000	983	976	98	98	70-130	1	20	
Calcium	ug/L	49300	10000	10000	58600	57300	93	80	70-130	2	20	
Lead	ug/L	3.1J	1000	1000	965	961	96	96	70-130	0	20	
Magnesium	ug/L	28200	10000	10000	37500	37000	93	88	70-130	1	20	
Total Hardness by 2340B	ug/L	239000			301000	295000				2		
Zinc	ug/L	31.4J	1000	1000	978	974	95	94	70-130	1	20	

MATRIX SPIKE SAMPLE: 1627889

Parameter	Units	60201956002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cadmium	ug/L	1.2J	1000	969	97	70-130	
Calcium	ug/L	43300	10000	52700	95	70-130	
Lead	ug/L	ND	1000	956	95	70-130	
Magnesium	ug/L	25600	10000	35200	97	70-130	
Total Hardness by 2340B	ug/L	213000		277000			
Zinc	ug/L	ND	1000	937	93	70-130	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: NATIONAL UAO (NATIONAL)
Pace Project No.: 60201959

QC Batch: MPRP/33065
QC Batch Method: EPA 200.7
Analysis Method: EPA 200.7
Analysis Description: 200.7 Metals, Dissolved
Associated Lab Samples: 60201959001

METHOD BLANK: 1627871
Matrix: Water
Associated Lab Samples: 60201959001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cadmium, Dissolved	ug/L	0.86J	5.0	09/04/15 16:46	
Lead, Dissolved	ug/L	ND	5.0	09/04/15 16:46	
Zinc, Dissolved	ug/L	ND	50.0	09/04/15 16:46	

LABORATORY CONTROL SAMPLE: 1627872

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cadmium, Dissolved	ug/L	1000	985	99	85-115	
Lead, Dissolved	ug/L	1000	1000	100	85-115	
Zinc, Dissolved	ug/L	1000	968	97	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1627873 1627874

Parameter	Units	60201956001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cadmium, Dissolved	ug/L	ND	1000	1000	963	962	96	96	70-130	0	20	
Lead, Dissolved	ug/L	ND	1000	1000	977	976	98	98	70-130	0	20	
Zinc, Dissolved	ug/L	25.5J	1000	1000	968	969	94	94	70-130	0	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: NATIONAL UAO (NATIONAL)
Pace Project No.: 60201959

QC Batch: WET/56976
QC Batch Method: SM 2540C
Analysis Method: SM 2540C
Analysis Description: 2540C Total Dissolved Solids
Associated Lab Samples: 60201959001

METHOD BLANK: 1627580
Matrix: Water
Associated Lab Samples: 60201959001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	5.0	09/03/15 15:45	

LABORATORY CONTROL SAMPLE: 1627581

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	1010	101	80-120	

SAMPLE DUPLICATE: 1627582

Parameter	Units	60201681001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	358	365	2	10	

SAMPLE DUPLICATE: 1627583

Parameter	Units	60201666003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	3800	3730	2	10	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: NATIONAL UAO (NATIONAL)
Pace Project No.: 60201959

QC Batch: WET/57057
QC Batch Method: SM 2540D
Analysis Method: SM 2540D
Analysis Description: 2540D Total Suspended Solids
Associated Lab Samples: 60201959001

METHOD BLANK: 1629624
Matrix: Water
Associated Lab Samples: 60201959001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Suspended Solids	mg/L	ND	5.0	09/09/15 09:48	

SAMPLE DUPLICATE: 1629625

Parameter	Units	60201956001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Suspended Solids	mg/L	ND	ND		10	

SAMPLE DUPLICATE: 1629626

Parameter	Units	60201975002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Suspended Solids	mg/L	18.0	22.0	20	10	D6

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: NATIONAL UAO (NATIONAL)
Pace Project No.: 60201959

QC Batch: WET/57012
QC Batch Method: SM 4500-H+B
Analysis Method: SM 4500-H+B
Analysis Description: 4500H+B pH
Associated Lab Samples: 60201959001

SAMPLE DUPLICATE: 1629091

Parameter	Units	60201917005 Result	Dup Result	RPD	Max RPD	Qualifiers
pH at 25 Degrees C	Std. Units	7.6	7.6	1	5	H6

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: NATIONAL UAO (NATIONAL)
Pace Project No.: 60201959

QC Batch: WETA/35800
QC Batch Method: EPA 300.0
Analysis Method: EPA 300.0
Analysis Description: 300.0 IC Anions
Associated Lab Samples: 60201959001

METHOD BLANK: 1629101
Matrix: Water
Associated Lab Samples: 60201959001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfate	mg/L	ND	1.0	09/08/15 13:18	

LABORATORY CONTROL SAMPLE: 1629102

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	5	4.8	97	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1629103 1629104

Parameter	Units	60201976001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	1580	1000	1000	2510	2490	93	91	80-120	1	15	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: NATIONAL UAO (NATIONAL)
Pace Project No.: 60201959

QC Batch: WETA/35849
QC Batch Method: SM 5310C
Analysis Method: SM 5310C
Analysis Description: 5310C Total Organic Carbon
Associated Lab Samples: 60201959001

METHOD BLANK: 1630541 Matrix: Water
Associated Lab Samples: 60201959001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Organic Carbon	mg/L	ND	1.0	09/10/15 14:16	

LABORATORY CONTROL SAMPLE: 1630542

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	5	5.0	100	80-120	

MATRIX SPIKE SAMPLE: 1630543

Parameter	Units	60201959001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	1.1	5	5.7	94	80-120	

SAMPLE DUPLICATE: 1630544

Parameter	Units	60201690009 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Organic Carbon	mg/L	ND	ND		25	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: NATIONAL UAO (NATIONAL)
Pace Project No.: 60201959

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-K	Pace Analytical Services - Kansas City

ANALYTE QUALIFIERS

D6	The relative percent difference (RPD) between the sample and sample duplicate exceeded laboratory control limits.
H6	Analysis initiated outside of the 15 minute EPA recommended holding time.

Pace Analytical Services, Inc.
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Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: NATIONAL UAO (NATIONAL)
Pace Project No.: 60201959

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60201959001	**36832/NAT EAST**	EPA 200.7	MPRP/33069	EPA 200.7	ICP/24401
60201959001	**36832/NAT EAST**	EPA 200.7	MPRP/33065	EPA 200.7	ICP/24397
60201959001	**36832/NAT EAST**	SM 2540C	WET/56976		
60201959001	**36832/NAT EAST**	SM 2540D	WET/57057		
60201959001	**36832/NAT EAST**	SM 2540F	WET/56986		
60201959001	**36832/NAT EAST**	SM 4500-H+B	WET/57012		
60201959001	**36832/NAT EAST**	EPA 300.0	WETA/35800		
60201959001	**36832/NAT EAST**	SM 5310C	WETA/35849		

Pace Analytical
www.pacelabs.com

Sample Condition Upon Receipt

WO# : 60201959

60201959

Client Name: DRC

Optional
Proj Due Date:
Proj Name:

Courier: FedEx ☑ UPS ☐ VIA ☐ Clay ☐ PEX ☐ ECI ☐ Pace ☐ Other ☐ Client ☐

Tracking #: 7744 2158 2714 Pace Shipping Label Used? Yes ☐ No ☐

Custody Seal on Cooler/Box Present: Yes ☑ No ☐ Seals intact: Yes ☑ No ☐

Packing Material: Bubble Wrap ☐ Bubble Bags ☐ Foam ☐ None ☑ Other ☐

Thermometer Used: CF +0.6 T-239 / CF +0.6 T-262 **Type of Ice:** (Wet) Blue None ☐ Samples received on ice, cooling process has begun.
(circle one)

Cooler Temperature: 1.0

Date and initials of person examining contents: 9/3/15

Temperature should be above freezing to 6°C

Chain of Custody present:	☑Yes ☐No ☐N/A	1.
Chain of Custody filled out:	☑Yes ☐No ☐N/A	2.
Chain of Custody relinquished:	☑Yes ☐No ☐N/A	3.
Sampler name & signature on COC:	☑Yes ☐No ☐N/A	4.
Samples arrived within holding time:	☑Yes ☐No ☐N/A	5.
Short Hold Time analyses (<72hr):	☑Yes ☐No ☐N/A	6. Scott Sol
Rush Turn Around Time requested:	☐Yes ☑No ☐N/A	7.
Sufficient volume:	☑Yes ☐No ☐N/A	8.
Correct containers used:	☑Yes ☐No ☐N/A	
Pace containers used:	☑Yes ☐No ☐N/A	9.
Containers intact:	☑Yes ☐No ☐N/A	10.
Unpreserved 5035A soils frozen w/in 48hrs?	☐Yes ☐No ☑N/A	11.
Filtered volume received for dissolved tests?	☐Yes ☑No ☐N/A	12.
Sample labels match COC:	☑Yes ☐No ☐N/A	
Includes date/time/ID/analyses Matrix: WT		13.
All containers needing preservation have been checked.	☑Yes ☐No ☐N/A	
All containers needing preservation are found to be in compliance with EPA recommendation.	☑Yes ☐No ☐N/A	14.
Exceptions: VOA, Coliform, O&G, WI-DRO (water)	☐Yes ☑No	Initial when completed / Lot # of added preservative
Trip Blank present:	☐Yes ☑No ☐N/A	
Pace Trip Blank lot # (if purchased):		15.
Headspace in VOA vials (>6mm):	☐Yes ☐No ☑N/A	16.
Project sampled in USDA Regulated Area:	☐Yes ☐No ☑N/A	17. List State:
Additional labels attached to 5035A vials in the field?	☐Yes ☐No ☑N/A	18.

JLI

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Jason Church 9/3/15

Project Manager Review: _____ Date: _____

THE DOE RUN COMPANY

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information:

Company:	The Doe Run Company
Address:	PO Box 500
Email To:	asanders@doerun.com
Phone:	(573) 689-4535 Fax: (573) 244-8179
Requested Due Date/TAT:	5 To 7 Days

Section B Required Project Information:

Report To:	Amy Sanders
Copy To:	
Purchase Order No.:	
Project Name:	National UAO (National)
Project Number:	

Section C Invoice Information:

Attention:	Amy Sanders
Company Name:	The Doe Run Company
Address:	PO Box 500, Viburnum, MO 6556
Pace Quote Reference:	
Pace Project Manager:	
Pace Profile #:	

Page: 1 of 1

REGULATORY AGENCY: ☐ NPDES ☐ GROUND WATER ☐ UST ☐ RCRA

Site Location STATE: MO

COC#: 2586

Requested Analysis Filtered (Y/N): N N N N N N N N N N N N N N N N N

*See Additional Comments Below

↓ Analysis Test ↓ 60201959

Section C Required Sample Information. Valid Matrix Codes: MATRIX / CODE — WATER WT, WASTE WATER WW, SOIL/SOLID SL

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COMPOSITE START DATE (mm/dd/yy)	COMPOSITE START TIME (Military)	COMPOSITE END / GRAB DATE (mm/dd/yy)	COMPOSITE END / GRAB TIME (Military)	SAMPLE TEMP AT COLLECTION	Total # OF CONTAINERS	250 mL Unpreserved	500 mL Unpreserved	1 L Unpreserved	250 mL Nitric	250 mL Amber Glass H_2SO_4	250 mL Plastic H_2SO_4	1000 mL Amber HCL	250 mL ZnAc/NaOH	500 mL Amber Glass H_2SO_4	Analysis Test	SEMO Lab Project No./ Lab I.D.	
1	36823 [illegible]	WT	G			09/02/15	1121		5	1	1	1	1	1					CD-D, PB-D, ZN-D, HARD, PH, SO4, SS, TDS, TOC, TSS	Nat East	001
2																			CD-T, PB-T, ZN-T		
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ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME (Military)	ACCEPTED BY / AFFILIATION	DATE	TIME (Military)	Temp in °C	pH in SU	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)
*200.7 Total Recoverable and Dissolved Metals	Larry Hopkins DRC	9/2/15	1300	[signature] PASI	9/3/15	0830	1.0		Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Larry Hopkins

SIGNATURE of SAMPLER: [signature]

DATE Signed (MM/DD/YY): 9/2/15